

## 'PLA goes MBES and GIS'

Talk given by Jim Powell, Hydrographic Surveyor, Port of London Authority to The Hydrographic Society UK, SW Region on 1<sup>st</sup> February 2005

Reported by Paul Edge with acknowledgements to PLA for illustrations



What better way to introduce and illustrate the scope of PLA's hydrographic operations than this image of a cruise ship entering the pool of London against an overview chart of their area of responsibility, extending as it does from Teddington locks in the west to the wide estuary into the North Sea in the east.



Fig 1 - Cruise ship entering the pool of London

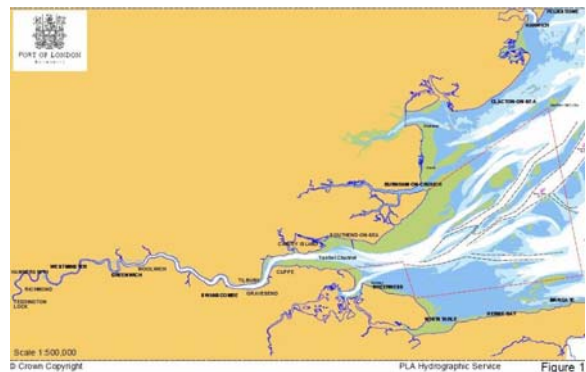


Fig 2 - Chartlet – Area of PLA responsibility

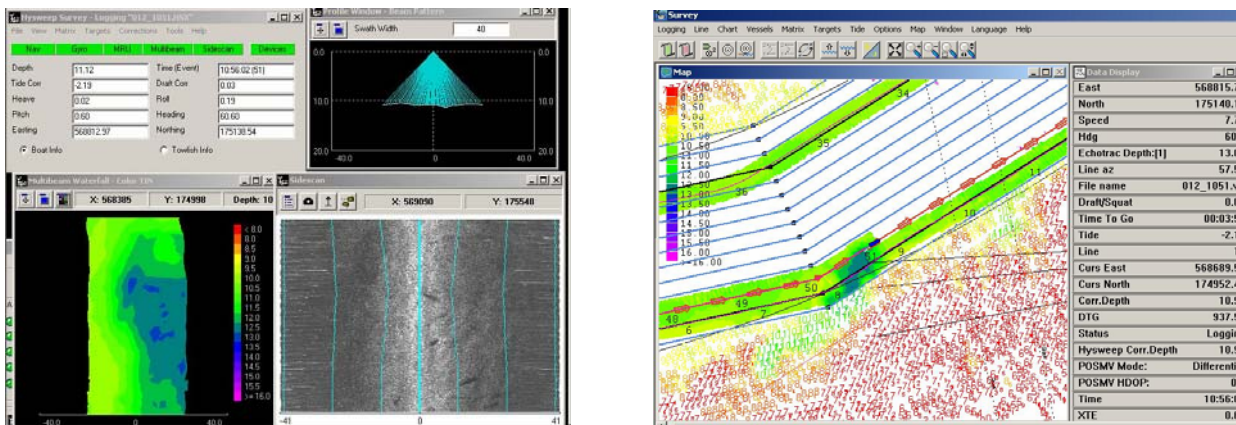
From sad days of decline in the seventies, the Port of London is now enjoying a renewed surge in shipping activity as the economy strengthens. Demands on PLA's hydrographic department for reliable charting to support pilotage operations have grown rapidly also. Reliable, in this context, means both accurate and up-to-date of course. The ability to survey an area quickly and to produce chart data almost instantly has now become essential where previously it was perhaps just a desirable goal.



Fig 3 - Survey Boat 'VERIFIER'

Jim Powell, a Hydrographic Surveyor from the Port of London Authority gave us a very interesting and instructive talk on PLA's experiences in introducing Multibeam Echo Sounder and GIS technology into their operations to make this possible. It is clear that a great deal of careful thought and effort went into both selecting a suitable system and fitting out their vessels. It is also clear that a great deal was

and still is, being learned about how it should be operated and how its products can be used most effectively. It was interesting to learn for example that while the hydrographic department use the system to rapidly update their charts, new data is routinely distilled right down to a curt report of just a few revised soundings at some critical 'hot-spots' in the channel for pilotage purposes. Under keel clearance and width of channel are obviously the most critical elements in the operation. Such margins translate directly into huge income variations for the port. Ports are responsible for the hydrographic information they provide to ship operators so decisions on what the Port will claim to be safe depths, channel widths and alignments are not taken lightly. No wonder therefore that PLA could see the advantages in investing in new technology to speed up their decision making process. Has it been successful? Well, yes Jim reported that though operation procedure manuals are still being rewritten, it has proved very successful so far! Unused to such rapid availability of information, it appears that the rest of the organization is also playing 'catch-up' to some extent. PLA expect that the application of GIS technology will further augment the rapid distribution of hydrographic data and will now begin to pay dividends also.



Figs 4 and 5 – Acquisition Displays

We are most grateful to PLA for allowing Jim to visit the Hydrographic Society, SW Region to give his open and illuminating presentation on their MBES/GIS experiences.